IceCube 14S & 14M

Computer-controlled freezing systems

Freezing: Simply Controlled & Precise

IceCube Control Rate Freezers (CRF) are equipped with the latest EDP components and offer Touch Screen Technology as the central control system. Liquid nitrogen injected over a turbine wheel equally disperses the desired temperature throughout the chamber making them the most reliable CRF available today.

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IceCube 14S

- Manual and automatic heating and cooling control
- Touchscreen monitor with unlimited program capability
- Temperature range: +40° to -180°C
- Freezing Rate: 0.00 to 60°C/min.
- Heating Rates: 0.01 to 20°C/min. (-180° to -50°C),
  0.01 to 15°C/min. (-50° to +20°C)
- Capacity: 1,080 - 0.25 or 0.5ml straws
- Dimensions: 22.4" x 19.7" x 32.3" (l x w x h)
- Freezing Chamber Dimensions: 8.5" x 8.5" x 13.7" (l x w x h)

IceCube 14S **16821/2010**

IceCube 14M

- Manual and automatic heating and cooling control
- Touch-screen monitor with unlimited program capability
- Temperature range: +40° to -180°C
- Freezing Rate: 0.00 to 60°C/min.
- Heating Rates: 0.01 to 20°C/min. (-180° to -50°C),
  0.01 to 15°C/min. (-50° to +20°C)
- Capacity: 2,760 - 0.25 or 0.5ml straws (double racks)
- Dimensions: 24.8" x 19.9" x 37" (l x w x h)
- Freezing Chamber Dimensions: 11.7" x 12.5" x 14.9" (l x w x h)

IceCube 14M **16821/4052**

Software • Image Display • Data Output

- Operating System MS Windows™ 7, XP Pro & 2000
- Data entered directly via touchscreen monitor
- Stores pre-selectable programs
- Graphical display of temperature curves of all connected thermal probes along with their demanded profile, zoom, program editor, detailed parameter settings, facilitate operation and monitoring
- The program's image display and processing options enable precise monitoring of the processes while generating or running programs. They also allow a rapid optimization of the chilling and re-thawing processes.
- Program process can be checked at the monitor, documented via the printer and/or data can be transferred via PDF
- Built-in lithium batteries keep configuration parameters from being lost during power failure.

Freezing Chamber

- Stainless steel freezing chamber with hinged transparent glass door
- Safety switch with warning light
- Gas turbulence via turbine
- Removal of the heat of crystallization due to counter cooling
- Second solenoid valve (option) for auto seeding
- Vibration element for alternative crystallization
- Pressure sensor for LN_2 supply
- Display accuracy: 0.01°C
- Resistance thermometers in shielded 4 wire measuring technology
- Thermo fuse overheating protection
- Variable start temperature

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